STATE OF MARYLAND

DHMH

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November 9, 2012

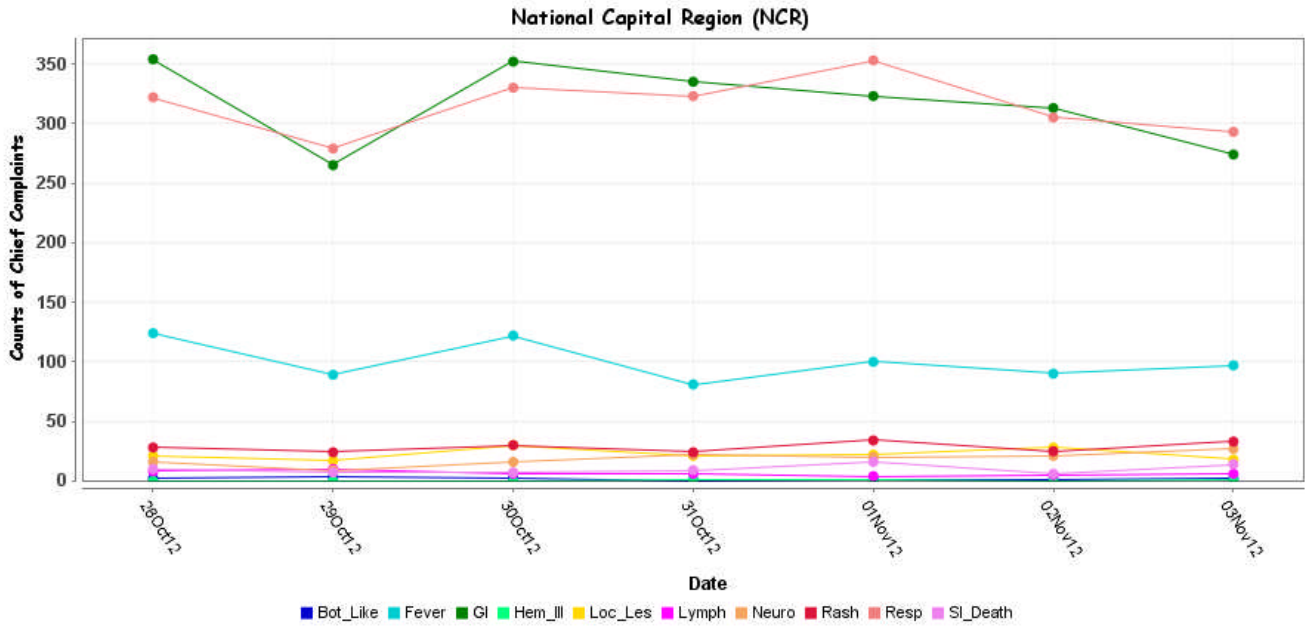
Public Health & Emergency Preparedness Bulletin: # 2012:44
Reporting for the week ending 11/03/12 (MMWR Week #44)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

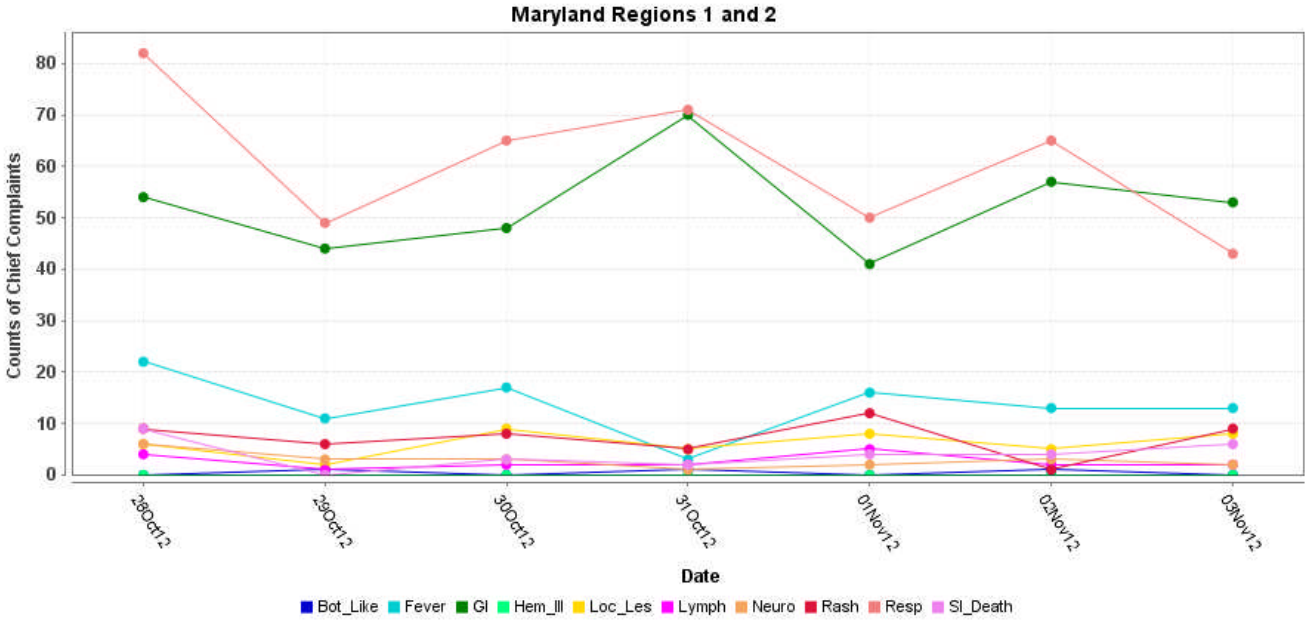
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

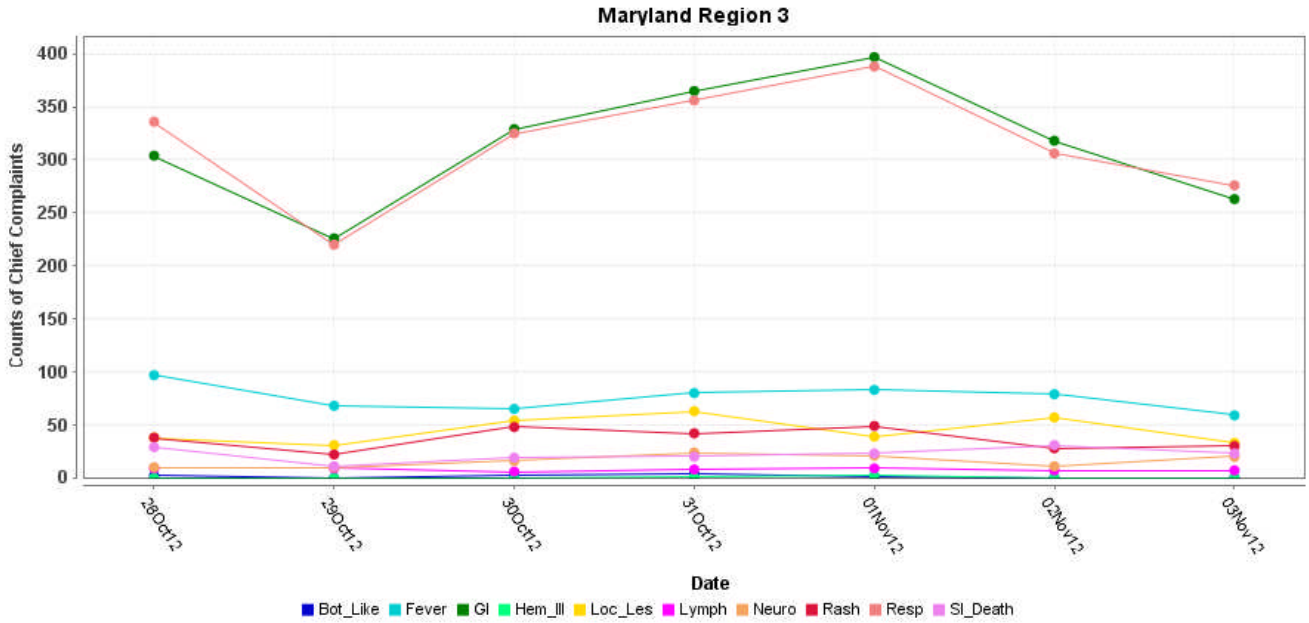


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

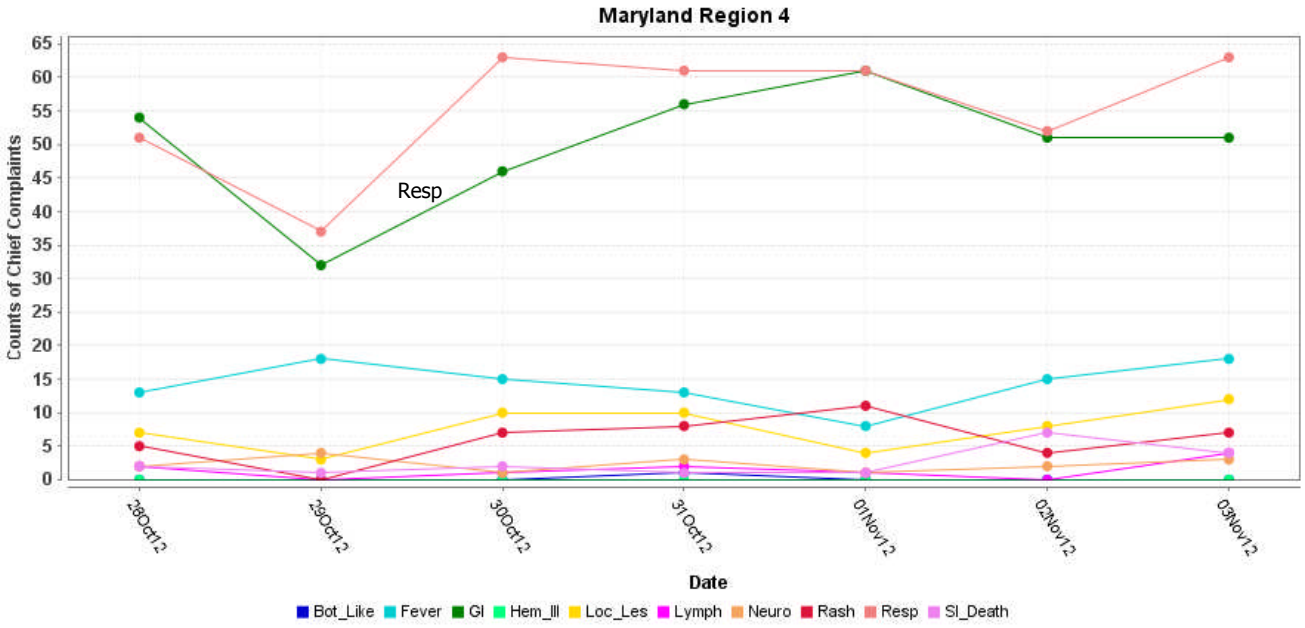
MARYLAND ESSENCE:



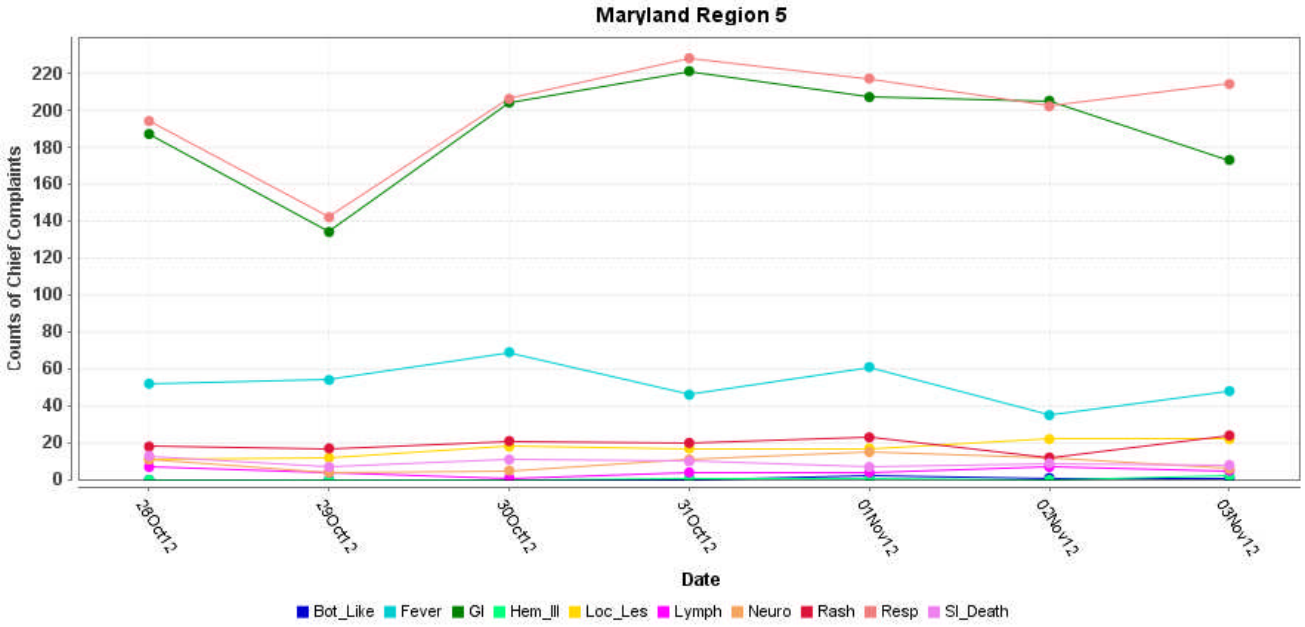
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



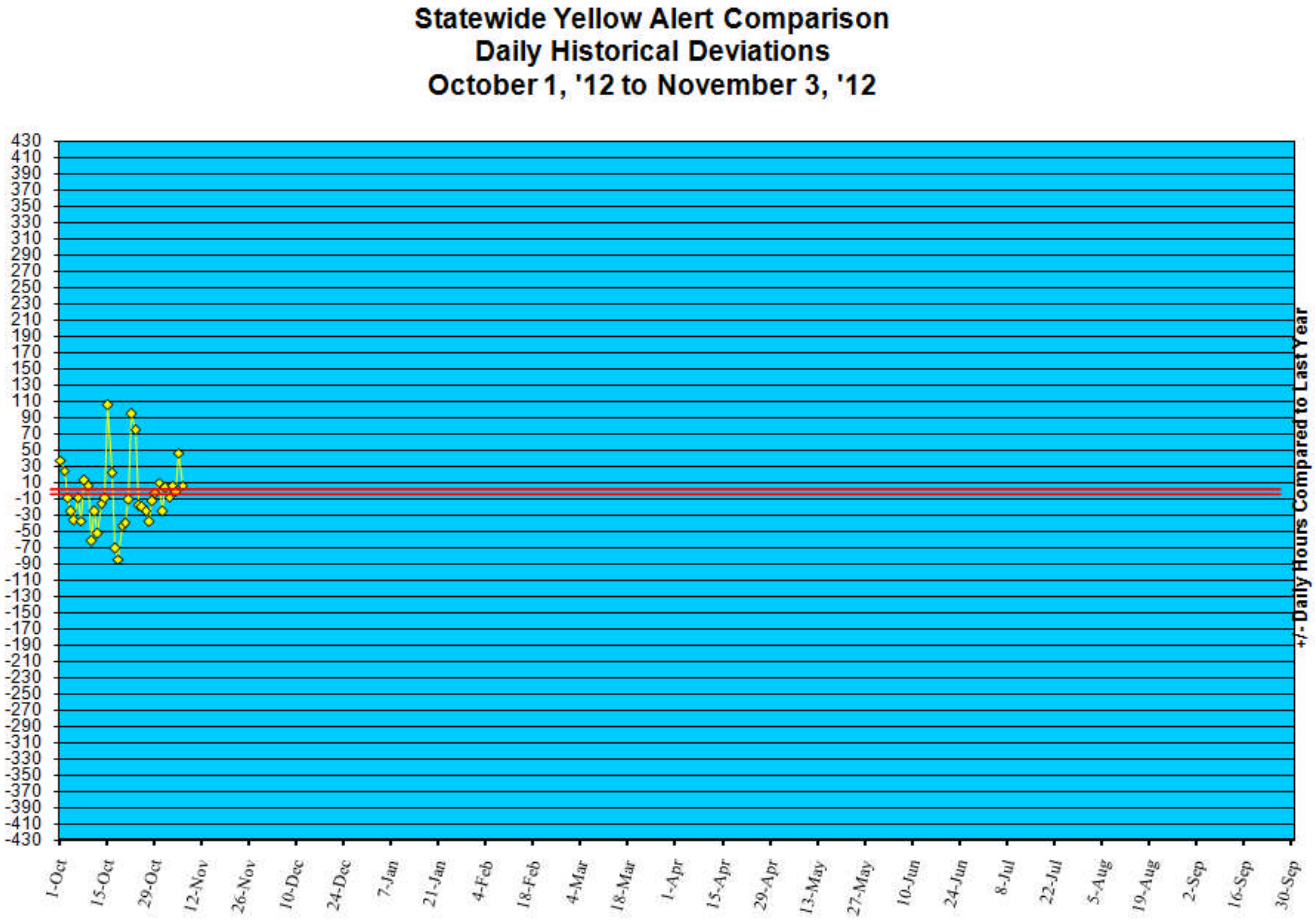
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (October 28 – November 3, 2012):	14	0
Prior week (October 21 – October 27, 2012):	17	0
Week#44, 2011 (October 30 – November 5, 2011):	15	0

2 outbreaks were reported to DHMH during MMWR Week 44 (October 27-November 3, 2012)

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS in a Nursing Home

1 Rash illness outbreak
1 outbreak of HAND, FOOT, AND MOUTH DISEASE associated with a School

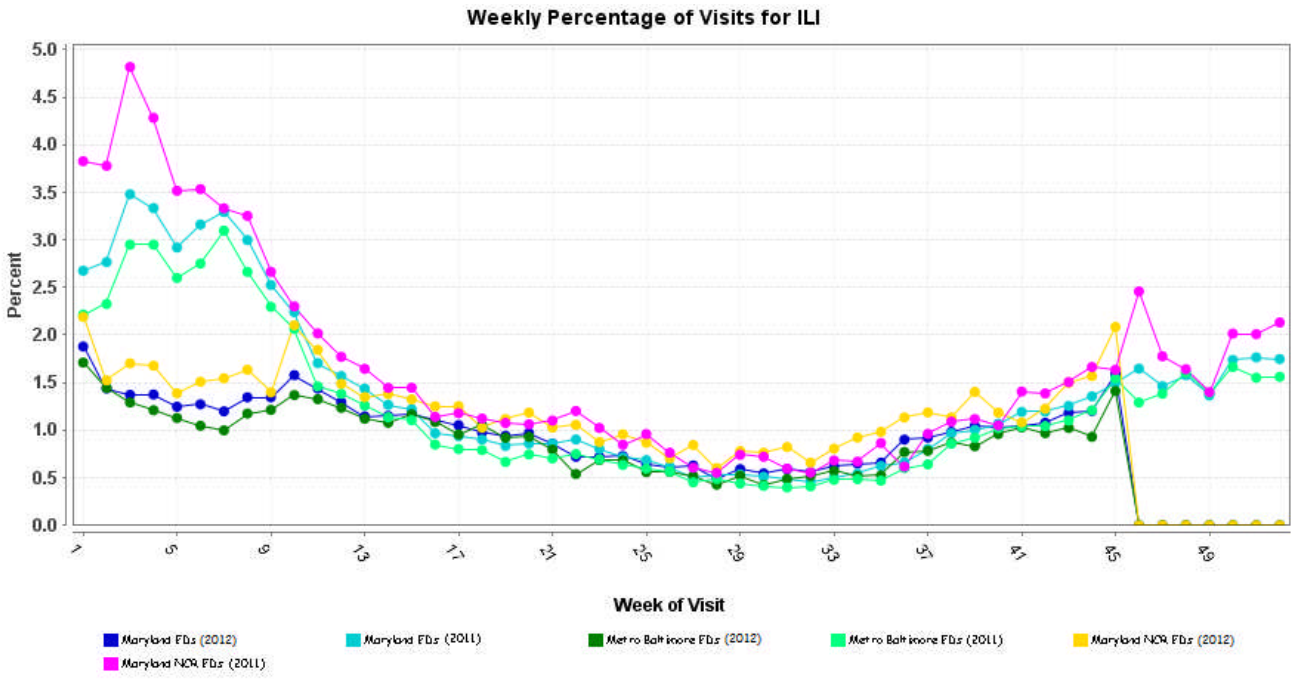
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 44 was: Sporadic Activity with Minimal Intensity.

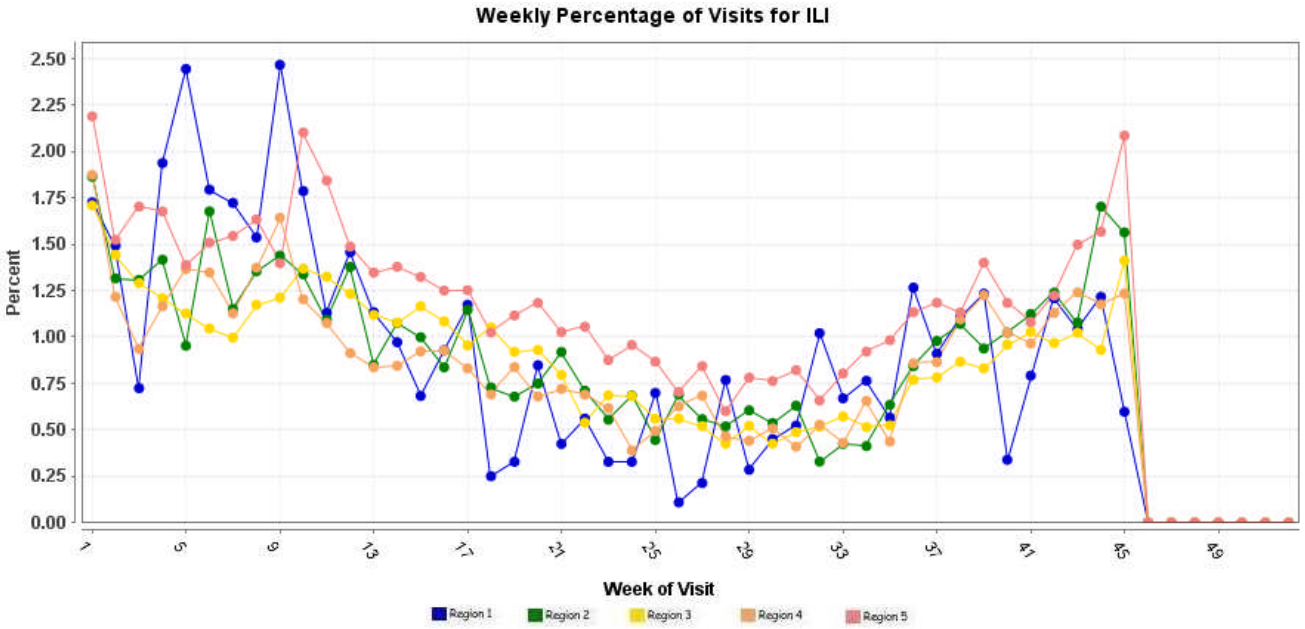
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



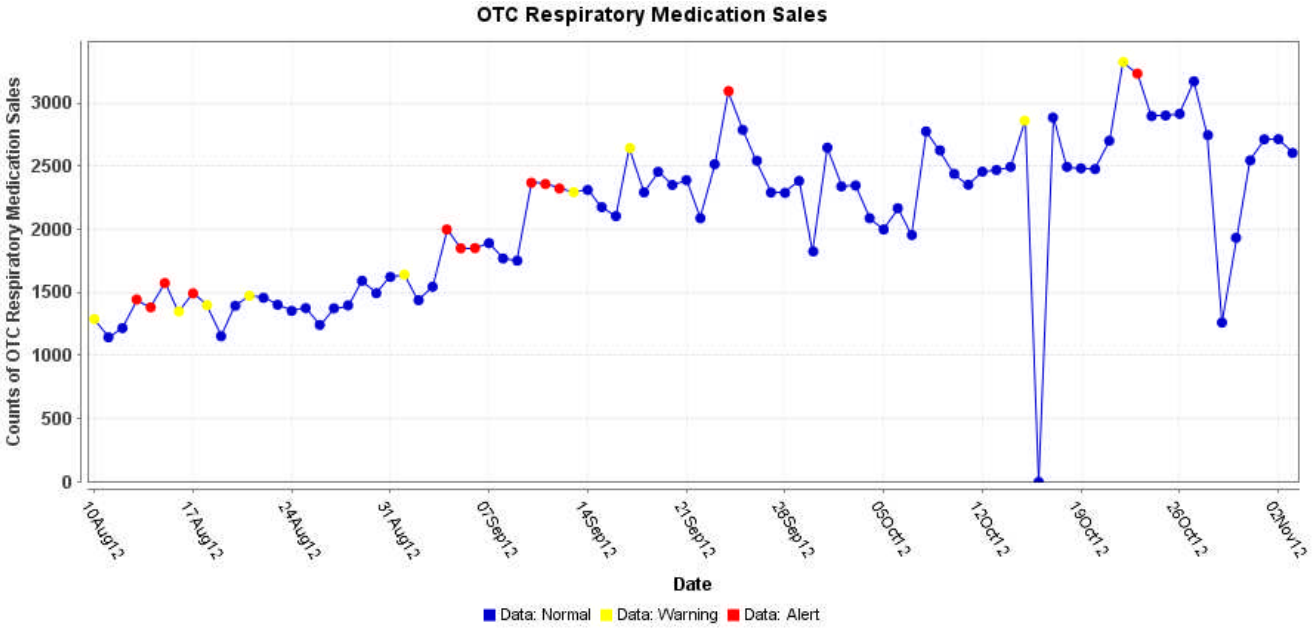
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of August 10, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 608, of which 359 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

E. COLI EHEC (NEW YORK): 2 November 2012, 16 people in New York State are suffering from *E. coli O157:H7* infections, apparently as a result of eating Wegmans Organic Spinach and Spring Mix. The product was supplied to Wegmans by State Garden, Inc. (Chelsea, MA). The outbreak victims are mostly from western New York State. Four people required hospitalization; 3 of those have already been released, according to Peter Constantakes of the New York State Department of Health. Food Safety News reports that the case patients are from Monroe, Niagara, Steuben and Wayne counties. No other states have reported outbreak-associated illnesses so far. According to test results, only products with a use-by date of 23 Oct 2012 are implicated in the illnesses; however, Wegmans has removed all date codes from its stores as a precaution. Wegmans has recalled approximately 31 000 lbs of its Organic Spinach and Spring Mix, sold in 5 oz and 11 oz clam shell packages in the produce department of its stores in New York, Pennsylvania, New Jersey, Virginia, Maryland, and Massachusetts between 14 Oct 2012 and 1 Nov 2012. Wegmans advises customers who purchased this product to discard any that remains in their homes. Customers should visit the service desk at Wegmans for a full refund. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

ANTHRAX (ENGLAND): 3 November 2012, The Health Protection Agency (HPA) is aware that a person who injected heroin has been diagnosed with anthrax infection in Oxford. The patient is recovering. This case has occurred after 2 people who injected drugs died from confirmed anthrax infection in Blackpool within a month of each other in August and September this year [2012]. There is an ongoing outbreak of anthrax among people who inject drugs in a number of countries in Europe with 12 cases now identified since early June [2012]. The latest case in Oxford brings the total number affected in the UK to 5 -- 3 in England (2 fatal, one recovering), one in Scotland, and one in Wales (both recovering).The source is presumed to be contaminated heroin. It is unclear as yet whether these recent cases are linked to the cases in Europe (4 in Germany, 2 in Denmark, and one in France) but the HPA is continuing to monitor the situation. The European Centre for Disease Prevention and Control (ECDC) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) have concluded that heroin users in Europe are still at risk of exposure to anthrax. Dr Fortune Ncube, an expert in infections among people who inject drugs at the HPA, said: "Anthrax can be cured with antibiotics, if treatment is started early. It is therefore important for medical professionals to be alert to the possibly of anthrax infection in heroin users presenting with signs and symptoms -- which include severe soft tissue infections or blood poisoning -- to prevent any delays in providing treatment. "It is possible that further cases may be seen in people who inject heroin. People who use drugs may become infected with anthrax when the heroin they use is contaminated with anthrax spores. This could be a source of infection if injected, smoked, or snorted. There is no safe route for consuming heroin or other drugs that may be contaminated with anthrax spores." NHS staff were made aware of the possibility of cases of anthrax in people who inject heroin following the 1st UK case earlier this year [2012]. Targeted information, including posters and leaflets aimed at heroin users, were also sent out by the National Treatment Agency to local drug partnerships for distribution to all organisations in touch with drug users, including hostels, housing departments, needle exchanges, benefit offices, community pharmacies, and social work departments. Dr Eamonn O'Moore, director of the HPA's Thames Valley Health Protection Unit, said: "In light of this recent case in Oxford, we have advised local Drug and Alcohol Action Teams to talk to their service users who inject drugs about the risk of anthrax infection. "Injecting drug users often experience skin infection but we strongly advise them not to ignore signs such as redness or excessive swelling around injection sites, or other symptoms of general illness such a high temperature, chills, severe headaches, or breathing difficulties. They should seek medical advice quickly in such circumstances generally but particularly now because we have concerns that some batches of heroin in circulation in Oxfordshire and the wider Thames Valley may be contaminated with anthrax. Early treatment with antibiotics is essential for a successful recovery." (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

YELLOW FEVER (SUDAN): 31 October 2012, A previously unknown disease which has claimed more than 30 lives in Sudan's troubled Darfur region this month [October 2012] has been identified as yellow fever, the World Health Organization (WHO) said on Tuesday [30 Oct 2012]. Preparations for a mass vaccination campaign are now underway. The outbreak was 1st detected early this month [October 2012] when a number of people in the central and southern regions of Darfur became ill and eventually died. Sudanese media said the victims suffered from a number of symptoms, including diarrhea, vomiting, and bleeding from both the mouth and nose. Tarik Jasarevic, a spokesman for the World Health Organization (WHO), on Tuesday [30 Oct 2012] said it had been informed by Sudan's Federal Ministry of Health (FMoH) that the outbreak is being caused by yellow fever. Since the 1st week of October [2012], a total of 84 suspected cases, including 32 deaths, have been reported in the districts of Azoom, Kass, Mershing, Nertiti, Nyala, Wadi Salih and Zalingei. "FMoH said that the immediate priority is to control the vector, reinforcing the disease surveillance system and raising public awareness on the prevention and control of this disease," Jasarevic said. "Preparations for a mass vaccination campaign are underway to vaccinate the at risk population in Darfur." According to Darfur radio station Dabanga, however, at least 37 people are believed to have died as a result of the disease, while 125 others have been infected. The radio station quoted a resident as saying that local authorities were slow to react and did not immediately take necessary action to contain the outbreak. "FMoH, WHO, as well as health partners are working on ground to ensure timely containment of the outbreak," Jasarevic added. There is no cure for yellow fever, which is an acute viral hemorrhagic disease transmitted by infected mosquitoes. Treatment is aimed at reducing the symptoms for the comfort of patients, and measures often taken include supportive care to treat dehydration and fever and blood transfusion if needed.

"It is a preventable disease with symptoms and severity varying from case to case," Jasarevic explained. "Protective measures like the use of bed nets, insect repellent and long clothing are considered the best methods to contain an outbreak. Vaccination is the single most important measure for preventing yellow fever." It is estimated some 200 000 people are infected by yellow fever each year, killing approximately 30 000 of them [worldwide estimates]. The virus is endemic in tropical areas of Africa and Latin America, which have a combined population of over 900 million people. Up to half of severely affected persons will die from the disease without treatment. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

MARBURG VIRUS DISEASE (UGANDA): 31 October 2012, As of 28 Oct 2012, a total of 18 cases and 9 deaths, including a health worker, have been reported from 5 districts, namely Kabale district, in southwestern Uganda, Kampala (the capital city), Ibanda, Mbarara and Kabarole. The case fatality rate is 50 percent. The outbreak was declared by the Ministry of Health in Uganda on 19 Oct 2012. Blood samples from 9 cases have been confirmed for Marburg virus at the Uganda Virus Research Institute (UVRI). Currently, 13 patients have been admitted to hospital (2 in Kampala, 8 in Kabale, 3 in Ibanda), and their contacts are listed for daily follow up. The latest confirmed case was admitted to Ibanda district isolation ward on Fri 26 Oct 2012. The World Health Organization (WHO) and international partners including the Centers for Disease Control and Prevention (CDC), the Uganda Red Cross (URCS), African Field Epidemiology Network (AFENET) and Medecins-Sans-Frontieres (MSF) are supporting the national authorities in outbreak investigation and response. The national task force has identified additional health care workers and epidemiologists to strengthen the teams in the field. Training of health workers on infection prevention and control, surveillance and clinical case management is ongoing. Social mobilization activities are being conducted, which include the dissemination of IEC (Information Education Communication) material, sensitization on Marburg prevention and control, and broadcast of information through radio channels. The 1st shipment of personal protective equipment (PPE) provided by WHO arrived over the weekend. The WHO Regional office has deployed an epidemiologist and a logistician to Uganda to support the response teams on the ground. In addition, a social mobilization expert from WHO Zambia Country Office and a logistician from the Regional Rapid Response Team network have been mobilized for immediate deployment. More experts are being identified by the Global Outbreak Alert and Response Network (GOARN). As the investigation into the outbreak continues, WHO and partners continue to support the national authorities as needed in the areas of coordination, infection prevention and control, surveillance, epidemiology, public information and social mobilization, anthropological analysis, and logistics for outbreak response. Neighboring countries have been contacted to strengthen cross border surveillance and preparedness to prevent cross border spread of the outbreak. WHO advises that there is no need for any restrictions on travel or trade with Uganda. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable